

# MATERIAL SAFETY DATA SHEET

DATE PREPARED: 05/15/2001

MSDS No: 7103

ORTHO® Lawn Insect Killer Granules (Ready-To-Use)

## 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** ORTHO® Lawn Insect Killer Granules (Ready-To-Use)**PRODUCT DESCRIPTION:** Insecticide**MANUFACTURER**

The ORTHO Group  
P.O. Box 1749  
Columbus, OH 43216

**24 HR. EMERGENCY TELEPHONE  
NUMBERS****Emergency Phone:** 1-800-225-2883**EPA REG. NO.:** 279-3173-239B **PN:** 7042

## 2. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS#
Bifenthrin	0.1	82657-04-3
INERT INGREDIENTS	99.9	

"Inert Ingredients" is a term defined by the U.S. Environmental Protection Agency under the Federal Insecticide, Fungicide, and Rodenticide Act (40 CFR 158.153). It refers to any substance, other than an active ingredient, which is intentionally added to a pesticide product. Some inert ingredients may be hazardous chemicals, as defined by the Federal OSHA Hazard Communication Standard (29 CFR 1910.1200). The hazards associated with these inert ingredients have been included in this document.

## 3. HAZARDS IDENTIFICATION

**EMERGENCY OVERVIEW****PHYSICAL APPEARANCE:** Tan, solid granules with slight musty odor**IMMEDIATE CONCERNS:** OVEREXPOSURE MAY OCCUR BY SKIN ABSORPTION OR BY INHALATION

-MAY CAUSE REVERSIBLE SKIN SENSATIONS SUCH AS NUMBING OR TINGLING

-MAY PRODUCE EYE AND SKIN IRRITATION; WASH SKIN AFTER PRODUCT CONTACT

-AVOID CONTACT WITH EYES, SKIN, OR CLOTHING

•KEEP OUT OF REACH OF CHILDREN

### POTENTIAL HEALTH EFFECTS

**EYES:** Eye contact may cause temporary discomfort (tearing, redness, etc.) due to the granular nature of the product.

**SKIN:** This substance is not expected to cause skin irritation. See Toxicological Information, section 11.

**INGESTION:** This substance is slightly toxic to internal organs if swallowed. The degree of injury will depend on the amount absorbed from the gut. See Toxicological Information, section 11.

**INHALATION:** If inhaled, this substance is considered practically non-toxic to internal organs. Breathing the dust may be irritating to the respiratory tract.

**ACUTE EFFECTS:** Effects from overexposure result from absorption through the skin or may result from inhaling the dust. Overexposure to the product may cause diarrhea. Contact with bifenthrin may occasionally produce skin sensations such as rashes, numbing, burning, or tingling. These skin sensations are reversible and usually subside within 12 hours.

## 4. FIRST AID MEASURES

**EYES:** Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes. Call a poison control center or doctor for treatment advice.

**SKIN:** If on skin or clothing, take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.

**INGESTION:** If swallowed, call a poison control center or doctor immediately for treatment advice. Have person sip glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor. Never give anything by mouth to an unconscious person.

**INHALATION:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

**NOTES TO PHYSICIAN:** This product has low oral and dermal toxicity. It is non-irritating to the eyes and skin. This product contains a granular material that may cause mechanical irritation to the eyes. Reversible skin sensations (paresthesia) may occur and ordinary skin salves have been found useful in reducing discomfort. Treatment is otherwise controlled by removal from exposure followed by symptomatic and supportive care. This product is a pyrethroid. If large amounts have been ingested, milk, cream, and other digestible fats and oils may increase absorption and so should be avoided.

## 5. FIRE FIGHTING MEASURES

**EXTINGUISHING MEDIA:** Use CO<sub>2</sub>, Dry Chemical or Foam extinguishing media.

**HAZARDOUS COMBUSTION PRODUCTS:** Heating this material may generate carbon monoxide, carbon dioxide, hydrogen chloride and hydrogen fluoride.

**EXPLOSION HAZARDS:** Product is slightly combustible. This material may support combustion at elevated temperatures.

**FIRE FIGHTING PROCEDURES:** Products of combustion from fires involving this material

may be toxic. Avoid breathing smoke and mists. Avoid personnel and equipment contact with fallout and runoff. Minimize the amount of water used for fire fighting. Do not enter any enclosed area without full protective equipment, including self-contained breathing equipment. Contain and isolate runoff and debris for proper disposal. Decontaminate personal protective equipment and fire fighting equipment before reuse. Read the entire document.

## 6. ACCIDENTAL RELEASE MEASURES

**SMALL SPILL:** Sweep up spills. Use good housekeeping practices. Avoid contact with clothing, skin, and eyes. Wash hands after handling.

**LARGE SPILL:** Keep material out of lakes, streams, ponds, and sewer drains. Large spills should be covered to prevent dispersal. For dry material, use a wet sweeping compound or water to prevent the formation of dust. If water is used, prevent dispersion of excess liquid by diking and absorbing with a non-combustible absorbent such as clay, sand or soil. Vacuum, shovel, or pump all waste material, including absorbent, into a drum and label contents for disposal.

To clean and neutralize spill area, tools, and equipment, wash with a suitable solution of caustic or soda ash, and an appropriate alcohol (methanol, ethanol, or isopropanol). Follow this by washing with a strong soap and water solution. Absorb, as above, any excess liquid and add to the drums of waste already collected.

## 7. HANDLING AND STORAGE

**GENERAL PROCEDURES:** Store in cool dry place, preferably in a locked storage area and avoid excess heat. Keep pesticide in original container.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**ENGINEERING CONTROLS:** Provide natural or mechanical ventilation to minimize exposure. If practical, use local mechanical exhaust ventilation at sources of air contamination such as open process equipment.

### PERSONAL PROTECTION

**EYES AND FACE:** Where there is potential for eye contact, wear chemical goggles and have eye flushing equipment available.

**SKIN:** Wear appropriate protective clothing and chemical resistant gloves to prevent skin contact. Consult glove manufacturer to determine appropriate type of glove for given application. Wash contaminated skin promptly. Launder contaminated clothing and clean protective equipment before reuse. Wash thoroughly after handling.

For application of product in accordance with label instructions, no special skin protection is required. **RESPIRATORY:** This material may be an inhalation hazard and, unless ventilation is adequate, the use of approved respiratory protection is recommended.

**OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200):****EXPOSURE LIMITS****Chemical Name****OSHA PEL ACGIH TLV ACGIH STEL**

Bifenthrin

None

None

None

**9. PHYSICAL AND CHEMICAL PROPERTIES****PHYSICAL STATE:** Granular**ODOR:** Faint musty odor.**APPEARANCE:** Tan solid granules**DENSITY:** 1.39 g/mL**10. STABILITY AND REACTIVITY****STABLE:** YES**HAZARDOUS POLYMERIZATION:** NO**CONDITIONS TO AVOID:** Avoid contact with heat or open flame.**11. TOXICOLOGICAL INFORMATION****ACUTE****DERMAL LD<sub>50</sub>:** EPA FIFRA Toxicity Category III, LD50 greater than 2,000 mg/kg.**ORAL LD<sub>50</sub>:** Rat = > 5 g/kg. EPA FIFRA toxicity Category - IV.

**CHRONIC: CARCINOGENICITY:** Mouse lifetime feeding study - high dose males - demonstrated an increase in urinary bladder hemangiopericytomas. There was no evidence of increased tumors in the other male or female mice dose levels. The carcinogen no observed effect level (NOEL) for male and female mice was 75 and 90 mg/kg/dy, respectively. Rat lifetime feeding study - no findings of tumors. The rat NOEL was 10 mg/kg/dy. EPA classified bifenthrin - Group C carcinogen.

**CARCINOGENICITY:****IARC:** No**NTP:** No**OSHA:** No

**NEUROTOXICITY:** Bifenthrin has not been associated with delayed peripheral neuropathy. Overexposure to pyrethroids results in a transient disruption in the depolarization of nerve membranes by interfering with the closing of the sodium channels. Signs of overexposure may be displayed by tremors, muscle fasciculations, ataxia, spasms, hyperexcitability, hyperactivity and convulsions. Localized skin contact with bifenthrin may result in temporary burning, tingling or numbness sensations.

**TERATOGENICITY:** Bifenthrin is not considered to be a teratogen (a substance that causes birth defects). The rat and rabbit developmental NOELs were 1 and 8 mg/kg/dy, respectively.

**REPRODUCTIVE TOXIN:** Bifenthrin is not considered to cause adverse reproductive effects. Results of a rat multigeneration reproduction study indicated no developmental toxicity or reproductive effects at the highest dose level of approximately 15 mg/kg/dy. The maternal toxicity NOEL was approximately 5 mg/kg/dy.

**MUTAGENICITY:** The results of a series of mutation testing indicate that bifenthrin has a low order of mutagenic potential.

## 12. ECOLOGICAL INFORMATION

**ENVIRONMENTAL DATA:** In soil, bifenthrin is stable over a wide pH range and degrades at a slow rate which is governed by soil characteristics. Bifenthrin will also persist in aquatic sediments. Bifenthrin has a high Log Pow ( $>6.0$ ), a high affinity for organic matter, and is not mobile in soil. Therefore, there is little potential for movement into ground water. There is the potential for bifenthrin to bioconcentrate ( $BCF = 11,750$ ).

**ECOTOXICOLOGICAL INFORMATION:** Bifenthrin is highly toxic to fish and aquatic arthropods and LC50 values range from 0.0038ug/L to 17.8 ug/L. In general, the aquatic arthropods are the most sensitive species. Care should be taken to avoid contamination of the aquatic environment. Bifenthrin had no effect on mollusks at its limit of water solubility. Bifenthrin is only slightly toxic to both waterfowl and upland game birds (LD50 values range from 1800 mg/kg to  $>2150$  mg/kg).

## 13. DISPOSAL CONSIDERATIONS

**FOR LARGE SPILLS:** Material collected that cannot be reprocessed should be disposed of in a landfill approved for pesticide disposal or in accordance with applicable Federal, state or local procedures.

**EMPTY CONTAINER:** Do not reuse container. Wrap empty container in several layers of newspaper and discard in trash.

## 14. TRANSPORT INFORMATION

**DOT (DEPARTMENT OF TRANSPORTATION)**

**PROPER SHIPPING NAME:** Not Regulated

**U.S. SURFACE FREIGHT CLASS:** Insecticides, Fungicides, Insect or animal repellents or vermin exterminators, NOI, Other than poison

**SPECIAL SHIPPING NOTES:** The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

## 15. REGULATORY INFORMATION

## UNITED STATES

## SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

PRODUCT CLASSIFICATION UNDER SECTION 311 OF SARA
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ACUTE: YES	CHRONIC: YES	FIRE: NO	REACTIVITY: NO	PRESSURE GENERATING: NO
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## CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA REGULATORY: Not listed.

## STATE REGULATIONS

PROPOSITION 65 STATEMENT: No ingredients on list.

## 16. OTHER INFORMATION

## HMIS CODES

FIRE: 0 HEALTH: 1 REACTIVITY: 0

## NFPA CODES

FIRE: 0 HEALTH: 1 REACTIVITY: 0

APPROVAL DATE: 05/15/2001

REVISION SUMMARY New MSDS

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